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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,810	12/14/2004	Shuichi Araki	121981	8602

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EXAMINER	
COLUCCI, MICHAEL C	
ART UNIT	**PAPER NUMBER**
2626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/517,810	ARAKI ET AL.	
	Examiner	Art Unit	
	Michael C. Colucci	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/14/2004.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> The factual inquiries set forth in **Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)**, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: **(See MPEP Ch. 2141)**
>
> a. Determining the scope and contents of the prior art;
> b. Ascertaining the differences between the prior art and the claims in issue;
> c. Resolving the level of ordinary skill in the pertinent art; and
> d. Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

2. Claim **** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chino US 5761637 A in view of Hladik US PGPUB 20040019590 A1.*

Re claim 1, "describing existing data using natural language", Chino teaches sound-recognition processing for converting the user's sound-signal to language information and natural language processing for converting the language information to semantic expression (Chino col 1 line 12-20).

"Designated an existing data created by a specific software object", Chino teaches multimedia data (col 13 line 30-35) but fails to teach data created by a software object. Hladik teaches a software program or object causing information processing to perform a particular function (Hladik [0162]).

Analyzing data to convert it to an "instruction sequence the software object has executed", Hladik teaches a set of instructions having a software program or objects having a particular function to conversion to another language, code, or notation (Hladik [0162]).

"Converting the instruction sequence into a function describing expression of natural language", the use of a function is broad and will be construed as a computing operation. ", Hladik teaches a set of instructions having a software program or objects having a particular function to conversion to another language, code, or notation (Hladik [0162]). "Natural language understood by a user", Hladik teaches input output interfaces for exchanging information such as keyboard, mouse, voice recognition system, speech output system, personal digital assistant, etc. (Hladik [0021]). The interaction of a user implies the user understanding information outputted. "Obtaining semantic information from the function describing expression", Chino teaches converting the user's sound-signal to language information and natural language processing for converting the language information to semantic expression (Chino col 1 line 12-20). "Creating a request describing expression by adding meaning to the function describing function", Chino teaches a problem solution section 13 generating response-intention information where if input-intention information is a request for some kinds of information, information retrieving processing is executed (Chino col 12 line 1-30). "Having meaning" is construed to be representative of user intention where a request for information is desired. Therefore, the combined teaching of Chino and Hladik would have rendered obvious the describing of data using natural

language through an instruction sequence producing a describing expression for the user to understand and handling requests from the user.

Claim 2 has been analyzed and rejected with respect to claim 1. Claim 2 is the program implementing the method of claim 1.

Re claim 3, "a dictionary specifying correspondence between instruction sequences", Chino teaches a clue dictionary (a clue is a word representing flow of data) that stores previous clues and an utterance function dictionary that previously stores correspondence relation between the clue and the utterance function representing effect for the flow of dialogue (Chino col 12 line 34-54). Chino also teaches utterance function rules, which are construed as instructions, where a relation between clues and utterance are extracted (Chino col 3 line 40-60). However Chino fails to teach "data formats". Hladik teaches an extraction object wherein each reference refers to a targeted data element; means for matching the references in the target object with data elements in the extraction object; and means for outputting the matched data elements in a predetermined format (Hladik [0010]). Therefore, the combined teaching of Chino and Hladik would have rendered obvious a dictionary corresponding to instruction sequences and data formats.

Re claim 4, "a dictionary specifying the correspondence between function describing expressions of natural language understandable to the user", Chino teaches a clue dictionary (a clue is a word representing flow of data) that stores previous clues and an utterance function dictionary that previously stores correspondence relation between the clue and the utterance function representing effect for the flow of dialogue

(Chino col 12 line 34-54). Chino also teaches utterance function rules, which are construed as instructions, where a relation between clues and utterance are extracted (Chino col 3 line 40-60). However Chino fails to teach "expressions of natural language understandable to the user". Hladik teaches input output interfaces for exchanging information such as keyboard, mouse, voice recognition system, speech output system, personal digital assistant, etc. (Hladik [0021]). Therefore, the combined teaching of Chino and Hladik would have rendered obvious a dictionary corresponding to understandable natural language and instruction sequences.

Re claim 5, "semantic expression of users requests", Chino teaches a problem solution section 13 generating response-intention information where if input-intention information is a request for some kinds of information, information retrieving processing is executed (Chino col 12 line 1-30). "Semantic expression" Chino teaches converting the user's sound-signal to language information and natural language processing for converting the language information to semantic expression (Chino col 1 line 12-20). "Functional descriptions" is construed to be data describing the users request. Chino teaches a clue dictionary (a clue is a word representing flow of data) that stores previous clues and an utterance function dictionary that previously stores correspondence relation between the clue and the utterance function representing effect for the flow of dialogue (Chino col 12 line 34-54). Utterances are construed to be sentences, words, or expressions. Therefore, the combined teaching of Chino and Hladik would have rendered obvious a dictionary corresponding to users requests and functional descriptions.

Re claim 6, "Conversion table listing words and phrases" where each "word or phrase is paired" with other "words or phrases that are replaceable with each other", a table is construed to be a dictionary, Chino teaches natural language processing for converting the language information to semantic expression (Chino col 1 line 12-20) as well as a clue dictionary (a clue is a word representing flow of data) that stores previous clues and an utterance function dictionary that previously stores correspondence relation between the clue and the utterance function dictionaries representing effect for the flow of dialogue (Chino col 12 line 34-54 & Fig. 15). Utterances are construed to be sentences, words, or expressions. Chino also teaches generating output information for change of topic using pairs of utterances (Chino col 12 line 1-15). Therefore, the combined teaching of Chino and Hladik would have rendered obvious a conversion table or dictionary for matching words or phrases with one another.

Examiner's Note

The referenced citations made in the rejection(s) above are intended to exemplify areas in the prior art document(s) in which the examiner believed are the most relevant to the claimed subject matter. However, it is incumbent upon the applicant to analyze the prior art document(s) in its/their entirety since other areas of the document(s) may be relied upon at a later time to substantiate examiner's rationale of record. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

However, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Colucci whose telephone number is (571)272-1847. The examiner can normally be reached on 7:30 am - 5:00 pm , alt. Fridays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571)-272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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